

REMARKS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested. Applicant wishes to express his appreciation for the courtesy extended during a recent phone call and hereby reaffirms the election of claims 1-15 and 20-28 for continuing prosecution in this application.

Claims 1-15 and 20-28 remain pending in this application. Claims 16-19 and 29-32 have been cancelled. Claims 1-6, 8, 10, 13, 20, 24, 26 and 27 have been amended.

Claims 4, 10, 13 and 26-27 have been objected to under 35 USC §112. Claims 4, 10, 13 and 26-27 have been amended to overcome the objection. Claims 2-3 and 5 have been amended to address the improper group listing as identified by the Examiner.

Claim 1 has been amended to further clarify the invention and to indicate that the substrates are positioned adjacent to one another and that the patterns of material are used to create a leveling effect by rising from the surface of each of the substrates such that they are substantially equivalent in height to one of the removable elements or the material that is used to join the two substrates to one another.

Claims 20 and 24 have been amended to clarify the creation of leveling aids in the construction and that the first and second patterns of material rise from the surface of the substrate so as to be equal to the thickness of other surfaces on the substrate thereby leveling the form construction.

Support for the amendments to the claims, including specifically the term leveling aids, is found throughout the specification including at paragraphs [0038], [0039], [0043], [0054] and other places in the specification.

The invention described in the instant application relates to a unique business form construction that overcomes a number of drawbacks suffered by prior art constructions. The market for card carrying business form products has dictated that a durable card product be provided on a carrier that is readily printable, such as a paper substrate. This demand has lead to the use of plastic cards, which are considerably more durable than a paper card, being placed on paper sheets and as well as being placed in wells and holes that have been created in paper sheets. The attempts of holes or wells are being made to offset some of the thickness difficulties encountered when using a separate plastic card along with a carrier substrate.

These card carrying products are now commonly being used in high volume applications such as distributing membership cards in connection with a health care plan and the like. While such prior constructions can be processed relatively easily in small batches, problems arise in high throughput situations, where thousands or even millions of cards need to be printed and distributed quickly. In such printing applications, high speed printers are fed from large trays that contain significant amounts of business forms. However, due to the uneven thicknesses of these prior constructions (when these assemblies are placed in a stack, the stack is not flat and is rather distorted as the stack will have a slope on one edge of the stack corresponding to the end where the card appears due to the increased thickness) and as such, only a small number of these forms can be placed in a tray at one time. This is due to the fact that larger amounts of such uneven thickness forms will cause jamming as forms on the top of the stacks tend to slide down the slope into the infeed rollers of the printer ahead of when the rollers are timed to grip the leading edge of the next form. Thus, the infeed rollers will grip two or more forms at a time and subsequently jam or have offset printing due to the position of multiple forms under the print head. In order to avoid this problem, the users of such printers have to replace the printer trays more often due to the fewer numbers of forms

that can be loaded in each tray, leading to slow downs in production and increased labor costs as more individuals need to be present in order to constantly load, replace trays and feed the printer.

The present invention on the other hand solves this problem by joining, in one exemplary embodiment, a sheet of plastic material from which one or more cards can be die cut to a printable sheet of material. The sheet of plastic is normally thicker than the sheet of printable material. In addition, the strip of material that joins the two substrates together also creates a ridge that is higher than either of the surfaces of the substrates. Thus, if a large number of business forms of the present invention were placed in a tray, without the benefit of leveling aids these forms too would suffer from slope stack difficulties mentioned above. However, the applicant has found that by placing additional patterns of material on various portions of the form assembly that serve as leveling aids that the differences in thicknesses can be eliminated thus creating a substantially flat form format when the form is placed in a large stack such as in an infeed tray for a printer. The inventor has in essence created leveling aids on the surface of the form to overcome the difficulties enumerated above.

Claims 1-7 and 11-14 have been rejected by the Examiner under 35 U.S.C. 102(b) as being anticipated by Mercer et al USP 6,340,512. Reconsideration and withdraw of the rejection is earnestly solicited.

The standard of review under section 102 is well known. "A claim is anticipated if each and every element as set forth in the claim is found, either expressly or inherently described, in a single, prior art reference." Verdegaal Bros. V. Union Oil Co., of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical

invention must be shown in as complete detail as is contained in the ...claim."

Richardson v. Suzuki Motor, Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). In the present instance, the claims are not anticipated by Mercer et al.

Mercer et al disclose a coplanar form assembly which is created by supplying a sheet of material into which one or more openings have been provided and cards are inserted within the openings. The cards are held in position through the use of strips of tape. Mercer et al is exactly the type of prior art over which the present invention is an improvement in that the cards will have a thickness greater than the substrate and in addition the tape strips intended to hold the cards in the openings creates a further raised surface that is higher than the surface of the substrate or cards. Thus, if a number of form products as described in Mercer et al were placed in a stack, the stack would itself have a slope.

The present invention seeks to provide a planar assembly constructed from two sheets of material, for example one sheet is paper and the other is plastic. In one embodiment of the present invention, the removable elements are die cut from the plastic material, thus, there is no need to insert plastic cards into the holes or cut outs as the second substrate supplied is a plastic material and can form the card. The construction disclosed in Mercer et al creates an uneven stack when a number of similar forms are placed in a stack, such as in a printer tray. The unevenness in the prior art constructions is created due to the differential thickness between the plastic cards, tape strips and the sheet of material. The present invention seeks to overcome this problem by applying leveling aids, patterns of material, to sections of the form construction that have a thickness less than other portions of the form assembly to offset the height differences in the form. Claim 1 has been amended to more definitely reflect this unique construction.

Claim 1 has also been amended to indicate that the two substrates that are used in the manufacture of the form assembly are made from distinct substrates having different properties. In addition, the substrates that form the assembly are placed adjacent one another and joined along one of the sides or edges of the substrates. The patterns of material are used to create leveling aids in the construction. None of these features are disclosed in Mercer et al and as such Mercer et al do not anticipate the claims of the invention.

Claims 2-7 and 11-14 are dependent on claim 1 and for the reasons set forth above, applicant does not believe that Mercer et al anticipates the claims of the invention.

Claim 15 has been rejected by the Examiner under 35 U.S.C. 103(a) as unpatentable over USP 6,340,512 to Mercer et al in view of USP 4,627,994 to Welsch. Reconsideration and withdraw of the rejection is earnestly solicited.

Welsch does not remedy the deficiencies of Mercer et al as to add self-laminating material to the construction of Mercer et al, such as pressure sensitive stock material, would only serve to increase the thickness of the card portion of the assembly, thereby further exacerbating the problems created by thickness differential in the business form. In addition, applicant would point out that the combination as suggested in the Official Action may not be possible as the additional pressure sensitive material needed to make a self laminating card, the adhesive and release liner, may interfere with the operation of the tape strips that are used to hold the cards in position in the construction.

Claims 20 and 22-23 have been rejected by the Examiner under 35 U.S.C. 103(a) as unpatentable over USP 6,340,512 to Mercer et al. Reconsideration and withdraw of the rejection is earnestly solicited.

The Examiner has the burden under 35 U.S.C. §103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Three criteria must be satisfied to establish a *prima facie* case of obviousness. First, the Examiner must show that some objective teaching in the prior art or some knowledge generally available to one of ordinary skill in the art would teach, suggest, or motivate one to modify a reference or to combine the teachings of multiple references. *Id.* Second, the prior art can be modified or combined only so long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Third, the prior art reference or combined prior art references must teach or suggest all of the claim limitations. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

Mercer et al do not suggest first and second patterns of material on the business form, particularly patterns that are used as leveling aids. Assuming for the sake of argument, Mercer et al only disclose a single pattern of tape that holds the cards in place on the form. There is no teaching or suggestion to add a second pattern of material to the form assembly as the cards are sufficiently held in place by the single row of tape. Moreover, one would have no motivation to add a second pattern of material as the cards in Mercer et al are held by the single pattern of tape.

With respect to claim 22, the indicia shown in FIGURE 2 of the drawings of Mercer et al are printed on the cards and not the tape as suggested in the Official Action. The tape strips in Mercer et al are intended to only hold the cards in position, and once the cards are removed the function of the tape is complete. In the present invention, the patterns of material are disposed on the surface or face of the form assembly and can be used to convey information to the recipient of the form assembly.

Claim 20 has been amended to more clearly recite that the first and second patterns along with the removable elements create a leveling effect by providing a second thickness that is substantially equal to the first thickness created by the removable element. This feature is clearly not taught, suggested or disclosed by the references either alone or in combination with one another.

Claims 24 and 26-28 have been rejected by the Examiner under 35 U.S.C. 103(a) as unpatentable over USP 6,340,512 to Mercer et al in view of USP 4,627,994 to Welsh. Reconsideration and withdraw of the rejection is earnestly solicited.

Claim 24 has been amended to indicate that at least the second pattern of material is applied to the form and creates a leveling aid to offset the differential thickness of the assembly so that the form will lay flat in a stack of similar form assemblies. Neither reference nor the combination of the references suggests this element.

Welsch relates to a fan folded pressure sensitive assembly that is used by impact label printers, the type commonly used in the latter part of the twentieth century. The form assembly was provided in a continuous assembly to be fed through a printer via the use of pin wheels and the pin feed strips 32. The construction in Welsch would create a sloped stack as there is a considerable difference in thickness on one side of the form assembly than the other, specifically that portion of the form where the pressure sensitive construction is present as in addition to the carrier ply, there is an adhesive layer and the upper ply.

Neither Welsch or Mercer et al provide any teaching or motivation to add an additional pattern of material to serve as a leveling aid in the construction and as such do not render the claim unpatentable. The problem solved by the present invention was not

identified until relatively recently due to changes in processing equipment and the specifications of that equipment. As such, one with skill in the art would not have used the teachings of either reference to arrive at the present invention.

Claims 8-9 and 21 have been rejected by the Examiner under 35 U.S.C. 103(a) as unpatentable over USP 6,340,512 to Mercer et al in view of Downs USP 6,830,795. Reconsideration and withdraw of the rejection is earnestly solicited.

Downs teach the use of release strips to allow removal of successive layers of labels and the like from the assembly. The patterns of material used in the present invention are used for purposes of leveling aids. If for example one were to rough the silicone pattern as required in claim 9, it is well known in the art that to do so reduces the release properties for purposes of removal of a label assembly as required in Downs. That is, a roughened release surface would require greater peel strength to remove the label if the label would remove at all, as the roughening would likely remove some of the release material allowing adhesive to cling directly to the surface of the ply. Thus, Downs teaches away from such a limitation.

Claim 25 is rejected by the Examiner under 35 U.S.C. 103(a) as unpatentable over USP 6,340,512 to Mercer et al in view of Welsch 4,627,994 and further in view of Downs USP 6,830,795. Reconsideration and withdraw of the rejection is earnestly solicited.

The patterns of release material of Downs would not be exposed until after the separation of the uppermost label from the assembly. Thus, a stack of form assemblies as described in Downs would be simply a stack of label assemblies, with no exposed



Crum
10/663,131

Page 16

patterns of silicone or other material. Downs does not use or teach the use of patterns of silicone or other material as leveling aids in a construction that when placed in a stack will create a substantially square, level stack of forms.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited. The Examiner is encouraged to contact the undersigned in the event any small matters remaining outstanding so as to eliminate the necessity of another action and response.

Respectfully submitted,

Michael C. Maier
Reg. No. 36,206

P.O. Box 938
2401 Cooper Street
Fort Scott, KS 66701
(620) 223-5500 x4250